Lakes, Ponds and Reservoirs

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Management of Hybrid Striped Bass in Iowa

Hybrid striped bass have become a sought-after species both in Iowa's large federal impoundments and in its urban fisheries, but little regard has been given to the value and benefit of utilizing more intensive rearing techniques to produce a more consistent product. Production of fingerling hybrid striped bass for introduction into Iowa's lakes has been sporadic, at best. Although relationships between fertilization, zooplankton production, general water quality issues and hybrid striped bass production are known, assessment and evaluation of these parameters for producing hybrid striped bass in Iowa has been elusive, resulting in extreme variation in production of this highly sought-after sport fish. Once hybrid striped bass reach fingerling size and are stocked into impoundments, they typically produce a year-class, but the bottleneck with this species is production to fingerling size. The sporadic production of phase I hybrid striped bass by the Iowa Department of Natural Resources (IDNR) limits the ability of fisheries managers to maintain adequate numbers of this popular sport fish species. even where they have been shown to produce strong year-classes. The lowa DNR and its partners has a strong history of assessing fertilization and plankton management techniques for production of strong year classes of sport fish species; this project will build upon that history to add hybrid striped bass to the exemplified production techniques for sport fish production and management in Iowa's lakes. A consistent, adequate production of hybrid striped bass will benefit anglers around the state of lowa, including urban fisheries. Additionally, monitoring the year-class strength of this species has not been well documented. lowa has a strong history of monitoring walleye year-class strength through both oxytetracycline marking and freeze branding, but no similar assessments have been documented for hybrid striped bass. Marking fish is an essential technique for fisheries biologists for collecting population statistics. Population estimates, direct assessment of growth, and estimates of both fishing and natural mortality on hybrid striped bass can be obtained from tagging studies.

We found that a 5% static salt solution for four hours significantly reduced mortality of hybrid striped bass during hauling. Freeze-branded 2-inch hybrid striped bass had greater mortality rates than fish branded at 4-inches. Hybrid striped bass readily took to feed in the laboratory, gaining 12% in length and 36% in weight over 12 days. These results are being used further assess hybrid striped bass rearing techniques by Iowa State University and Rathbun Culture Research.